DataLink 250E

Category 6E Unshielded RJ-45 Keystone Jacks

Description

HCS DataLink 250E patented unshielded copper RJ-45 keystone jack series includes high performance Category 6 snap-in 8-position/8-contact (8P8C) jacks conforming to IEC 60603-7-4 (unshielded 250 MHz connectors). HCS DataLink 250E jacks are designed for fast and easy snap-in and out of wall plates, patch panels and surface box outlets.
HCS DataLink 250E jacks are designed in 90° or 180° formation and are available with back interconnection of 110 IDC blocks in T568A, T568B or Universal pin/pair assignment. All jacks fully conform to and provide a substantial margin above all ANSI/TIA-568-C.2 and ISO/IEC-11801 (2nd Edition) Category 6 component requirements, tested and verified at the component level.
The HCS Logo and the DataLink 250E Trademark ensure long lasting high-performance and support most present applications, including 1000BASE-T (Gigabit-Ethernet).

Applications

HCS DataLink 250E unshielded copper RJ-45 keystone jacks are used in wall plates, patch panels and surface box outlets and they fully support the following protocols:

- 1000BASE-T Gigabit Ethernet
- ATM 155
- TP-PMD
- 100BASE-T "Fast Ethernet"
- 100BASE-T2
- 100BASE-T4
- 100BASE-TX
- Token Ring 100 Mbps
- ATM 52
- ATM 25
- 10BASE-T Ethernet
- Token Ring 4 Mbps and 16 Mbps
- Broadband and Baseband Video
- ISDN Basic and Primary Access
- 1BASE-5 Starlan
- ISALAN
- ITU V.21 and X.11

Qualifications and Approvals

HCS DataLink 250E jacks are supported by the Century™ Lifetime Warranty and by the DoubleSafe™ QA program as a part of complete HCS cabling system. HCS DataLink 250E jacks are tested and verified as components and they comply to IEC 60603-7-4 (unshielded 250 MHz connectors) and to the following standards:

Transmission	EMC	Safety
■ ANSI/TIA-568-C.1	■ EN-55022, Class B (Europe)	■ UL94 V-0 rated plastic materials
■ ANSI/TIA-568-C.2	■ FCC Part 15, Subpart J, Class A (USA)	■ Zero-halogen in LS0H constructions.
■ ISO/IEC-11801		

Benefits & Features

- Exceptional material properties and design - providing a unique Century™ Lifetime Warranty.
- Patented 90° or 180° design - providing easier access, better and faster wire connection.
- Detailed installation manual in English and Turkish - providing clear and comprehensive instructions.
- Exceeding Category 6 performance - providing full support to Gigabit Ethernet over Category 6.
- Robust and installer-friendly design - providing reduced installation and operating costs.
- Compatible with 22-26 AWG solid or stranded conductors - providing support to a wider range of cabling types.
- Available in T568A, T568B or Universal pin/pair assignment - providing a wider product range.
- Unique DoubleSafe™ Quality Assurance Program - providing lowest rejection rate available.

General Properties

Housing material	High impact, Flame-retardant plastic compound, UL 94 V-0.
Jack contacts material	50 micro-inches gold plating over 100 micro-inches nickel plated copper alloy.
Environmental conditions	-40 to +60C at 0-90%RH (non condensing)
Packaging	50 or 100 units per box.
Plug Retention Force	14 Kgf (140N) min.
Plug to jack contact force	100gr min. (Using HCS approved plug).
Storage Temperature	-20 to +80C
Plug insertion durability	750 mating cycles
Conductor compatibility range	22 to 26 AWG, solid or stranded
Standard Color	White. Other colors available upon request.

DataLink 250E HES Cabling Systems

DataLink 250E

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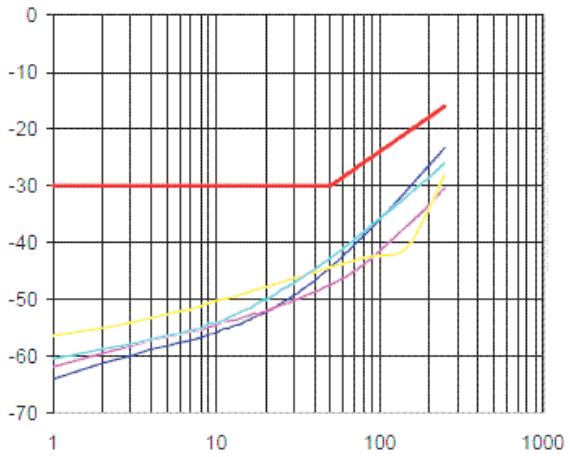
Transmission and Electrical Specifications

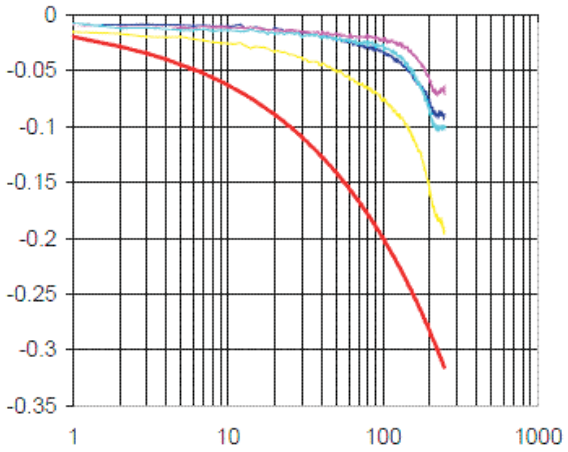
FREQ.	Insertion Loss	NEXT	FEXT	RL
MHz	dB	dB	dB	dB
	Max	Min	Min	Min
1.00	0.02	85.0	84.0	53.0
4.00	0.02	81,0	75.0	54.0
8.00	0.02	78.0	70.0	56.0
10.00	0.03	77.0	68.0	57.0
16.00	0.03	73.0	58.0	58.0
25.00	0.04	70.0	60.1	60.0
31.25	0.04	68.0	59,0	57.0
62.50	0.05	64.0	53.0	44.0
100.00	0.06	60.0	49.0	34.0
200.00	0.06	55.0	43.0	23.0
250.00	0.08	52.0	41.0	20.0

Typical De-Embedded Return-Loss

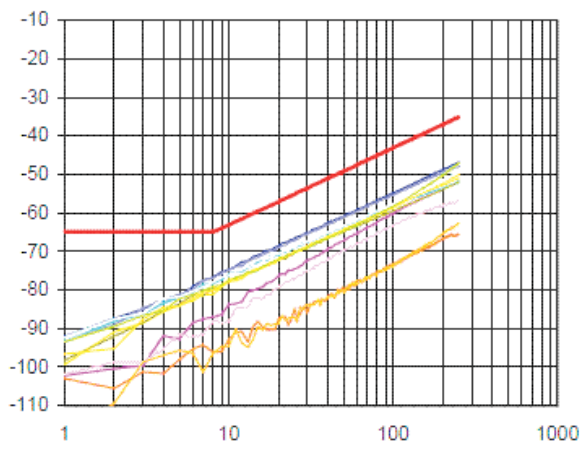


Propagation Delay	2.5 nS max @ 1-250 MHz
Propagation Delay Skew	1.25 nS max @ 1-250 MHz
Current rating	1.5 A max.
Contact resistance	20 mOhm max (per contact)
Input/Output resistance	200 mOhm max
Input/Output resistance Unbalance	50 mOhm max
Voltage rating	72 Vdc max.
Dielectric strength	1000 Volts rms for 1 minute
Insulation Resistance	500 MegaOhm min @ 500 Vdc
DC Resistance	0.1 Ohm max @ 20C
TCL	28-20·Log(f/100) dB min @ 1-250 MHz
Transfer Impedance	N/A

Typical De-Embedded Insertion-Loss



Typical De-Embedded FEXT-Loss



Ordering Information

HCS P/N	Description	Orientation	Blocks	T568
J6E-00811	8P8C RJ-45 Unshielded Keystone Jack CAT 6E	90°	110 IDC	B
J6E-00812	8P8C RJ-45 Unshielded Keystone Jack CAT 6E	90°	110 IDC	A
J6E-00813	8P8C RJ-45 Unshielded Keystone Jack CAT 6E	90°	110 IDC	UNI
J6E-00871	8P8C RJ-45 Unshielded Keystone Jack CAT 6E	180°	110 IDC	B
J6E-00872	8P8C RJ-45 Unshielded Keystone Jack CAT 6E	180°	110 IDC	A
J6E-00873	8P8C RJ-45 Unshielded Keystone Jack CAT 6E	180°	110 IDC	UNI
J6E-00881	8P8C RJ-45 Unshielded Slim Keystone Jack CAT 6E	180°	110 IDC	B
J6E-00882	8P8C RJ-45 Unshielded Slim Keystone Jack CAT 6E	180°	110 IDC	A
J6E-00883	8P8C RJ-45 Unshielded Slim Keystone Jack CAT 6E	180°	110 IDC	UNI
J6E-00891	8P8C RJ-45 Unshielded Slim Keystone Jack CAT 6E	90°	110 IDC	B
J6E-00892	8P8C RJ-45 Unshielded Slim Keystone Jack CAT 6E	90°	110 IDC	A
J6E-00893	8P8C RJ-45 Unshielded Slim Keystone Jack CAT 6E	90°	110 IDC	UNI